

81 1. (Twice Amended) A method for manufacturing an electrical device, said method comprising:

- forming at least a thin film transistor on an insulating surface;
- forming a first insulating film comprising an organic resin over the thin film transistor;
- forming a second insulating film comprising silicon nitride on the first insulating film;
- forming a pixel electrode on the second insulating film, said pixel electrode electrically connected to the thin film transistor;
- forming an EL layer over the pixel electrode;
- forming a second electrode over the EL layer,
- wherein the EL layer is selectively formed through an ink jet method,
- wherein the insulating film is capable of preventing penetration of alkaline metal].

82 2. (Twice Amended) A method for manufacturing an electrical device, said method comprising:

- forming at least a thin film transistor;
- forming a first insulating film comprising an organic resin over the thin film transistor;
- forming a second insulating film comprising at least one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide on the first insulating film;
- forming a pixel electrode over the second insulating film, said pixel electrode electrically connected to the thin film transistor;
- forming an EL layer over the pixel electrode;
- forming a second electrode over the EL layer,
- wherein the EL layer is selectively formed through an ink jet method.

15/ 3. (Twice Amended) A method for manufacturing an electrical device, said method comprising:

- forming at least a thin film transistor on an insulating surface;

forming a first insulating film comprising an organic resin over the thin film transistor;

forming a second insulating film comprising diamond like carbon on the first insulating film;

forming a pixel electrode over the second insulating film, said pixel electrode electrically connected to the thin film transistor;

forming a EL layer over the pixel electrode;

forming a second electrode over the EL layer;

wherein the EL layer is selectively formed through an ink jet method.

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4. (Twice Amended) A method for manufacturing an electrical device, said method comprising:

forming at least a thin film transistor on an insulating surface;

forming a first insulating film comprising silicon nitride over the thin film transistor;

forming a second insulating film comprising an organic resin on the first insulating film;

forming a third insulating film comprising silicon nitride on the second insulating film, wherein the third insulating film comprises the same material as the first insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

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5. (Twice Amended) A method for manufacturing an electrical device comprising:
forming at least a thin film transistor on an insulating surface;
forming a first insulating film comprising at least one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide over the thin film transistor;

forming a second insulating film comprising an organic resin on the first insulating film;

forming a third insulating film comprising at least the one selected from the group consisting of aluminum oxide, aluminum nitride and nitrated aluminum oxide on the second insulating film, wherein the third insulating film comprises the same material as the first insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

D2 31. (Amended) A method according to claim 1,

wherein the second insulating film comprises at least one selected from the group consisting of silicon nitride oxide and silicon nitride.

D3 38. (Amended) A method according to claim 1,

wherein the EL layer is formed in a dry nitrogen atmosphere.

D4 40. (Amended) A method according to claim 1,

wherein the EL layer is formed in a dry argon atmosphere.

Please add new claims 41-71 as follows:

45 41. A method according to claim 1, further comprising:
forming a contact hole in the first and second insulating films,
wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

7 42. A method according to claim 1, further comprising:
forming a contact hole in the first and second insulating films;
forming the pixel electrode on the second insulating film,

wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

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~~43~~. A method according to claim ~~2~~, further comprising:

forming a contact hole in the first and second insulating films,

wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

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~~44~~. A method according to claim ~~2~~, further comprising:

forming a contact hole in the first and second insulating films;

forming the pixel electrode on the second insulating film,

wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

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~~45~~. A method according to claim ~~3~~, further comprising:

forming a contact hole in the first and second insulating films,

wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

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~~46~~. A method according to claim ~~3~~, further comprising:

forming a contact hole in the first and second insulating films;

forming the pixel electrode on the second insulating film,

wherein the second insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first and second insulating films.

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~~47~~. A method according to claim ~~4~~,

wherein the third insulating film comprises at least one selected from the group consisting of silicon nitride oxide and silicon nitride.

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~~48.~~ A method according to claim ~~4~~, further comprising:
forming a contact hole in the first, second and third insulating films,
wherein an upper diameter of the contact hole is longer length than a lower
diameter of the contact hole.

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~~49.~~ A method according to claim ~~4~~, further comprising:
forming a contact hole in the first, second and third insulating films;
forming the pixel electrode on the third insulating film,
wherein the third insulating film is not in contact with side surfaces of the contact
hole while the pixel electrode is in contact with the side surface of the contact hole and edges of
the first, second and third insulating films.

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~~50.~~ A method according to claim ~~5~~, further comprising:
forming a contact hole in the first, second and third insulating films,
wherein an upper diameter of the contact hole is longer length than a lower
diameter of the contact hole.

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~~51.~~ A method according to claim ~~5~~, further comprising:
forming a contact hole in the first, second and third insulating films;
forming the pixel electrode on the third insulating film,
wherein the third insulating film is not in contact with side surfaces of the contact
hole while the pixel electrode is in contact with the side surface of the contact hole and edges of
the first, second and third insulating films.

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~~52.~~ A method for manufacturing an electrical device comprising:
forming at least a thin film transistor on an insulating surface;
forming a first insulating film comprising diamond like carbon over the thin film
transistor;
forming a second insulating film comprising an organic resin on the first
insulating film;

forming a third insulating film comprising diamond like carbon on the second insulating film, wherein the third insulating film comprises the same material as the first insulating film;

forming a pixel electrode over the third insulating film, said pixel electrode electrically connected to the thin film transistor;

forming an EL layer over the pixel electrode;

forming a second electrode over the EL layer,

wherein the EL layer is selectively formed through an ink jet method.

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~~53~~. A method according to claim ~~52~~,³⁶

wherein the EL layer is an organic material.

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~~54~~. A method according to claim ~~52~~,³⁶

wherein the ink jet method uses a piezo element.

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~~55~~. A method according to claim ~~52~~,³⁶

wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

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~~56~~. A method according to claim ~~52~~, further comprising:³⁶

forming a contact hole in the first, second and third insulating films,

wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

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~~57~~. A method according to claim ~~52~~, further comprising:³⁶

forming a contact hole in the first, second and third insulating films;

forming the pixel electrode on the third insulating film,

wherein the third insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the first, second and third insulating films.

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~~58~~. A method for manufacturing an electrical device, said method comprising:

forming at least a thin film transistor on an insulating surface;
forming a first insulating film over the thin film transistor;
forming a second insulating film on the first insulating film;
forming a third insulating film on the second insulating film;
forming a fourth insulating film on the third insulating film;
forming a contact hole in the second, third and fourth insulating films;
forming a pixel electrode over the fourth insulating film, said pixel electrode

electrically connected to the thin film transistor through the contact hole;

forming a bank on the fourth insulating film;
forming an EL layer over the pixel electrode;
forming a second electrode over the EL layer;
forming a protection electrode over the second electrode;
forming a fifth insulating film over the protection electrode;
wherein the EL layer is selectively formed through an ink jet method,
wherein the third insulating film comprises an organic material,
wherein the EL layer is formed in a dry nitrogen atmosphere.

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~~59~~. A method according to claim ~~58~~,

wherein the EL layer is an organic material.

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~~60~~. A method according to claim ~~58~~,

wherein the ink jet method uses a piezo element.

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~~61~~. A method according to claim ~~58~~,

wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

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~~62~~. A method according to claim ~~58~~,

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wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

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~~63~~. A method according to claim ~~58~~,

wherein the fourth insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the second, third and fourth insulating films.

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~~64~~. A method according to claim ~~58~~,

wherein each of second, fourth and fifth insulating films comprises a same material.

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~~65~~. A method for manufacturing an electrical device, said method comprising:

forming at least a thin film transistor on an insulating surface;
forming a first insulating film over the thin film transistor;
forming a second insulating film on the first insulating film;
forming a third insulating film on the second insulating film;
forming a fourth insulating film on the third insulating film;
forming a contact hole in the second, third and fourth insulating films;
forming a pixel electrode over the fourth insulating film, said pixel electrode electrically connected to the thin film transistor through the contact hole;
forming a bank on the fourth insulating film;
forming an EL layer over the pixel electrode;
forming a second electrode over the EL layer;
forming a protection electrode over the second electrode;
forming a fifth insulating film over the protection electrode;
wherein the EL layer is selectively formed through an ink jet method,
wherein the third insulating film comprises an organic material,
wherein the EL layer is formed in a dry argon atmosphere.

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~~66~~. A method according to claim ~~66~~,

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wherein the EL layer is an organic material.

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~~67~~. A method according to claim ~~65~~,

wherein the ink jet method uses a piezo element.

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~~68~~. A method according to claim ~~65~~,

wherein one of the pixel electrode and the second electrode comprises at least one selected from the group consisting of magnesium (Mg), lithium (Li), cesium (Cs), barium (Ba), potassium (K), beryllium (Be), or calcium (Ca).

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~~69~~. A method according to claim ~~65~~,

wherein an upper diameter of the contact hole is longer length than a lower diameter of the contact hole.

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~~70~~. A method according to claim ~~65~~,

wherein the fourth insulating film is not in contact with side surfaces of the contact hole while the pixel electrode is in contact with the side surface of the contact hole and edges of the second, third and fourth insulating films.

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~~71~~. A method according to claim ~~65~~,

wherein each of second, fourth and fifth insulating films comprises a same material.--

REMARKS

At the outset, the Examiner is thanked for the review and consideration of the present application.

The Examiner's final Office Action dated December 5, 2001 has been received and its contents reviewed. By this Amendment, claims 7, 10-12, 21-23, 32, and 35 have been canceled, claims 1-5, 31, 36, 38 and 40 have been amended, and new claims 41-71 have been added. Claims 6, and 24-29 have been withdrawn from consideration. Accordingly, claims 1-6, 8-9, 13-